Experiment Number	Model	Result	Decision + Explanation
1	Conv3D	Throws OOM Error	Decrease the batch size and number of layers
2	Conv3D	categorical_accuracy: 1.0000 val_categorical_accuracy: 0.7700	Total Params:1,096,901 epoch:10 Model is Overfit
3	Conv3D	categorical_accuracy: 0.9188 val_categorical_accuracy: 0.4900	Total Params:1,096,901 epoch:10 dropout value 0.25 Still model is Overfit. Increase dropout value.
4	Conv3D	categorical_accuracy: 0.6834 val_categorical_accuracy: 0.2200	Total params: 1,900,997 epoch:10 dropout value 0.5 Very Less accuracy. Reduce the number of layers
5	Conv3D	categorical_accuracy: 0.4890 val_categorical_accuracy: 0.1600	Total params: 252,149 epoch:10 dropout value 0.5 Accuracy is lesser than the previous model. Let's drop dropout.
6	Conv3D	categorical_accuracy: 0.9943 val_categorical_accuracy: 0.7200	Total params: 252,149 epoch:10 After removing the dropout model again is overfit. Lets reduce the filter size.
7	Conv3D	categorical_accuracy: 0.7743 val_categorical_accuracy: 0.7032	Total params: 252,149 epoch:10 filter size (2,2,2) Now the model is not overfit. we can increase the accuracy by increasing the no. of epoch.
8	Conv2D + LSTM	categorical_accuracy: 0.6222 val_categorical_accuracy: 0.6600	Total params: 3,392,869 epoch:10 Now the model is not overfit and accuracy is also increased. Lets increase no. of layers and epoch.

9	**Conv2D + LSTM**	**categorical_accuracy: 0.7537** **val_categorical_accuracy: 0.6800**	**Total params: 1,657,445** **epoch:15** **Accuracy is increased. We can increase more epoch to check if the accuracy is increased or not.**
10	**Conv2D + GRU**	**categorical_accuracy: 0.7624** **val_categorical_accuracy: 0.6700**	**Total params: 1,346,021** **epoch:15** **Accuracy is Slightly increased.**
Final Model	**Conv2D + GRU**	**categorical_accuracy: 0.8387** **val_categorical_accuracy: 0.7800**	**Total params: 2,573,541** **epoch:20** **Accuracy is increasing. We can increase accuracy by increasing the image resolution and no. of frames.**